



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/784,627

02/23/2004

David J. Benard

01AB005A /  
ALBRP234USA

8374

7590

09/09/2005

EXAMINER

PATEL, NITIN

Susan M. Donahue  
Rockwell Automation  
704-P, IP Department  
1201 South 2nd Street  
Milwaukee, WI 53204

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/784,627

**Applicant(s)**

BENARD ET AL.

**Examiner**

Nitin Patel

**Art Unit**

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-17,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 3-5,18,19,22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-2, 6-17,20,21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kent (U.S. Patent No. 6,723,929).

As per claim 1, Kent shows a touch screen system (In Abstract) having a substrate that has a surface (In fig.13) a plurality of acoustic wave transducers having at least a first acoustic wave transducer that is fixed to a perimeter of the substrate surface and transmits a first acoustic wave across the substrate surface(In fig.13 element 1301 and 1305) and a control component that determine a location of a perturbation on the substrate surface (In fig.31a controller element 3140).

As per claim 2, Kent discloses a plurality of transducers at least second and third acoustic wave transducers located near the perimeter of the substrate surface that receive acoustic waves that propagate along the substrate surface (In fig.15 and In col.57 lines 50-67).

As per claim 6, Kent shows the surface is at least one of sod lime glass substrate capable of supporting acoustic wave propagation (In col. 19 lines 35-67).

As per claim 7, Kent shows at least one piezoelectric element (In Col.29 lines 32-37).

As per claims 8-11, Kent disclose plurality of transducers transmitting transducer that convert an electrical signal into an acoustic wave that is propagated across the surface (In fig.13) and at least two receiving transducers that convert an acoustic wave that is propagated across the substrate surface into an electrical signal (In fig.15) which having an amplifier associated with each receiving transducer that amplifies the electrical signal produced by the receiving component for analysis by the control component (In fig.30 and 31).

As per claims 12, 20 Kent disclose for determining a location of a perturbation on a substrate surface having transmitting an acoustic wave across a substrate surface from one or more transducer coupled to perimeter of the substrate surface (In fig.13 x and y transducers); detecting the transmitted acoustic wave at two or more points (in fig.16) and detecting extant time delays between transmission of the acoustic wave and receipt of the acoustic wave at the at least two points (In fig.21 using time delays) and

determining a location of the substrate surface based at least in part on detected time delays (In fig.14 and description of fig.14 in specification).

As per claims 13-17, Kent shows acoustic wave at a broad diffraction angle to propagate (in fig.15 at the angle of 60 degree) and transmitting the electrical signals during transmission to the control compound (In col.37-45).

As per claim 21, Kent shows longitudinally directing a transmitted acoustic wave to the means for receiving the transmitted acoustic wave (In fig.13).

***Allowable Subject Matter***

3. Claims 3-5,18,19,22,23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest the location of the perturbation on the substrate surface is determined based, at least in part, on time delays between transmission of the first acoustic wave from the first transducer and receipt of a corresponding acoustic wave at each of the second and third transducers that was reflected or scattered from the location of the substrate surface being perturbed as claimed in claim 3.

The prior art fails to teach or suggest analyzing the electrical signals to determine the time delay between transmission of the acoustic wave and receipt of the transmitted acoustic wave at each receiving transducer as claimed in claim 18.

The prior art fails to teach or suggest for converting an electrical signals into a mechanical signal that stresses the substrate surface and converting a mechanical

Art Unit: 2673

stress signal to an electrical signal indicative of the mechanical stress signal as claimed in claims 22,23.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP



September 5, 2005